

AMENDMENTS TO THE CLAIMS

Claims 1-22. (*cancelled*)

Claim 23. (*currently amended*) A method for improving the precision in counting the number of particles or cells suspended in a given volume of a test sample [that] wherein the number of particles or cells ranges from low particle/cell counts to high particle/cell counts, comprising:

- 5 a) delivering a sheath stream of the test sample at a first volumetric flow rate to a [detection means for counting] particle counting means to count the number of particles or cells in the test sample, wherein the sheath stream has a cross-sectional diameter adapted to deliver to said [detection] particle counting means substantially one particle or cell [at] of the test sample at a time;
- 10 b) making an initial count at the first volumetric flow rate of the particles or cells of said test sample per unit time with said [detection] particle counting means;
- c) comparing the initial count of the number of cells or particles in the test sample to a reference value;
- 15 d) adjusting the flow rate of the test sample to a second volumetric flow rate based on the comparative number of cells or particles in the test sample to the reference value, thereby improving the

20

precision of the [detection] particle counting means in counting the number of cells or particles in the test sample

Claim 24. (*previously presented*) The method of claim 23, wherein the second volumetric flow rate optimizes the ability of the detection means to make a precise count of the particles or cells in the test sample.

Claim 25. (*previously presented*) The method of claim 23, wherein the test sample is a hematology sample.

Claim 26. (*previously presented*) The method of claim 23, wherein the first volumetric flow rate of the sheath fluid is at laminar flow.

Claim 27. (*previously presented*) The method of claim 23, wherein the detection means is magnetic.

Claim 28. (*previously presented*) The method of claim 23, wherein the detection means is optical.

Claim 29. (*previously presented*) The method of claim 23, wherein the detection means is a laser beam.